

IN THE CLAIMS

Please amend claims 1, 4, 6, 8, 9, 12, 14, 16, 17, 22 and 24 as indicated below.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended) A computer implemented method for queue order notification comprising:

- (a) determining a current position of a patron in a queue;
- (b) determining a current estimated time remaining for said patron using the current position of the patron and a selected set of historical data; and
- (c) transmitting queue order information to the patron using a preselected communication channel, and wherein, ~~if the preselected communication channel is a duplex channel,~~ the queue order information comprises a patron-selectable set of queue order information, the patron-selectable set including the current estimated time remaining and the current position of the patron in the queue.

Claim 2 (original) The method of claim 1 wherein the set of historical data comprises a queue servicing rate for a preceding time interval, the estimated time remaining determined using a linear extrapolation with said queue servicing rate.

Claim 3 (original) The method of claim 2 wherein the queue servicing rate comprises a rate at which patrons have been served between a current time and a preceding notification time and wherein the set of historical data further comprises seasonal average patron service rates.

Claim 4 (currently amended) The method of claim 1 wherein the steps (a), (b) and (c) are repeated at a preselected notification criterion, and wherein, ~~if the communication channel is a duplex channel,~~ the a preselected notification interval comprises a patron-selected notification criterion.

Claim 5 (original) The method of claim 4 wherein the patron-selected notification criterion comprises one of a set including a preselected notification time interval and a preselected queue position.

Claim 6 (currently amended) The method of claim 1 further comprising:

(d) notifying the patron upon reaching a head of the queue using the communication channel; and

(e) ~~[[if]]~~ in response to the patron ~~[[fails]]~~ failing to respond after an expiry of a predetermined time interval after step (d), moving the patron to another position within the queue.

Claim 7 (original) The method of claim 6, wherein the another position within the queue is an end of the queue.

Claim 8 (currently amended) The method of claim 1 further comprising:

(d) ~~[[if]]~~ in response to the patron ~~[[is]]~~ being at the head of the queue, determining if the patron can be accommodated; and

(e) ~~[[if]]~~ in response to the patron ~~cannot be~~ not being accommodated, interchanging the current position of the patron and position of a next patron in the queue.

Claim 9 (currently amended) A computer program product embodied in a tangible storage medium, the program product for queue order notification comprising programming instructions for:

(a) determining a current position of a patron in a queue for receiving a service from a service provider;

(b) determining, a current estimated time remaining for said patron using the current position of the patron and a selected set of historical data; and

(c) transmitting queue order information to the patron using a preselected communication channel, and wherein, ~~if the preselected communication channel is a duplex channel,~~ the queue order information comprises a patron-selectable set of queue-order information, the patron-selectable set including the current estimated time remaining and the current position of the patron in the queue.

Claim 10 (original) The program product of claim 9 wherein the set of historical data comprises a queue servicing rate for a preceding time interval, the estimated time remaining determined using a linear extrapolation with said queue servicing rate.

Claim 11 (original) The program product of claim 10 wherein the queue servicing rate comprises a rate at which patrons have been served between a current time and a preceding notification time and wherein the set of historical data further comprises seasonal average patron service rates.

Claim 12 (currently amended) The program product of claim 9 further comprising programming instructions for repeating (a), (b) and (c) at a preselected notification criterion, and wherein, ~~if the communication channel is a duplex channel, the a~~ preselected notification interval comprises a patron-selected notification criterion.

Claim 13 (original) The program product of claim 12 wherein the patron-selected notification criterion comprises one of a set including a preselected notification time interval and a preselected queue position.

Claim 14 (currently amended) The program product of claim 9 further comprising programming instructions for:

(d) notifying the patron upon reaching a head of the queue using the communication channel; and

(e) [[if]] in response to the patron [[fails]] failing to respond after an expiry of a predetermined time interval after step (d), moving the patron to an end of the queue.

Claim 15 (original) The program product of claim 14 wherein the another position within the queue is an end of the queue.

Claim 16 (currently amended) The program product of claim 9 further comprising programming instructions for:

(d) [[if]] in response to the patron [[is]] being at the head of the queue, determining if the patron can be accommodated; and

(e) ~~[[if]] in response to the patron cannot be not being~~ accommodated, interchanging the current position of the patron and position of a next patron in the queue.

Claim 17 (currently amended) A data processing system comprising:

(a) circuitry operable for determining a current position of a patron in a queue for receiving a service from a service provider;

(b) circuitry operable for determining, a current estimated time remaining for said patron using the current position of the patron and a selected set of historical data; and

(c) circuitry operable for transmitting queue order information to the patron using a preselected communication channel, and wherein, ~~if the preselected communication channel is a duplex channel,~~ the queue order information comprises a patron-selectable set of queue-order information, the patron-selectable set including the current estimated time remaining and the current position of the patron in the queue.

Claim 18 (original) The data processing system of claim 17 wherein the set of historical data comprises a queue servicing rate for a preceding time interval, the estimated time remaining determined using a linear extrapolation with said queue servicing rate.

Claim 19 (original) The data processing system of claim 18 wherein the queue servicing rate comprises a rate at which patrons have been served between a current time and a preceding notification time and wherein the set of historical data further comprises seasonal average patron service rates.

Claim 20 (original) The data processing system of claim 17 wherein (a), (b) and (c) further comprise circuitry operable for, patron at a preselected notification criterion, repeating the operations of:

- (i) determining a current position of the patron;
- (ii) determining a current estimated time remaining; and
- (iii) transmitting queue order information to the patron.

Claim 21 (original) The data processing system product of claim 20 wherein the patron-selected notification criterion comprises one of a set including a preselected notification time interval and a preselected queue position.

Claim 22 (currently amended) The data processing system of claim 17 further comprising:

(d) circuitry operable for notifying the patron upon reaching a head of the queue using the communication channel; and

(e) circuitry operable for, [[if]] in response to the patron [[fails]] failing to respond after an expiry of a predetermined time interval the operation in (d), moving the patron to an end of the queue.

Claim 23 (original) The data processing system of claim 22 wherein the another position within the queue is an end of the queue.

Claim 24 (currently amended) The data processing system of claim 17 further comprising:

(d) circuitry operable for, [[if]] in response to the patron [[is]] being at the head of the queue, determining if the patron can be accommodated; and

(e) circuitry operable for, [[if]] in response to the patron ~~cannot be~~ not being accommodated, interchanging the current position of the patron and position of a next patron in the queue.